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This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

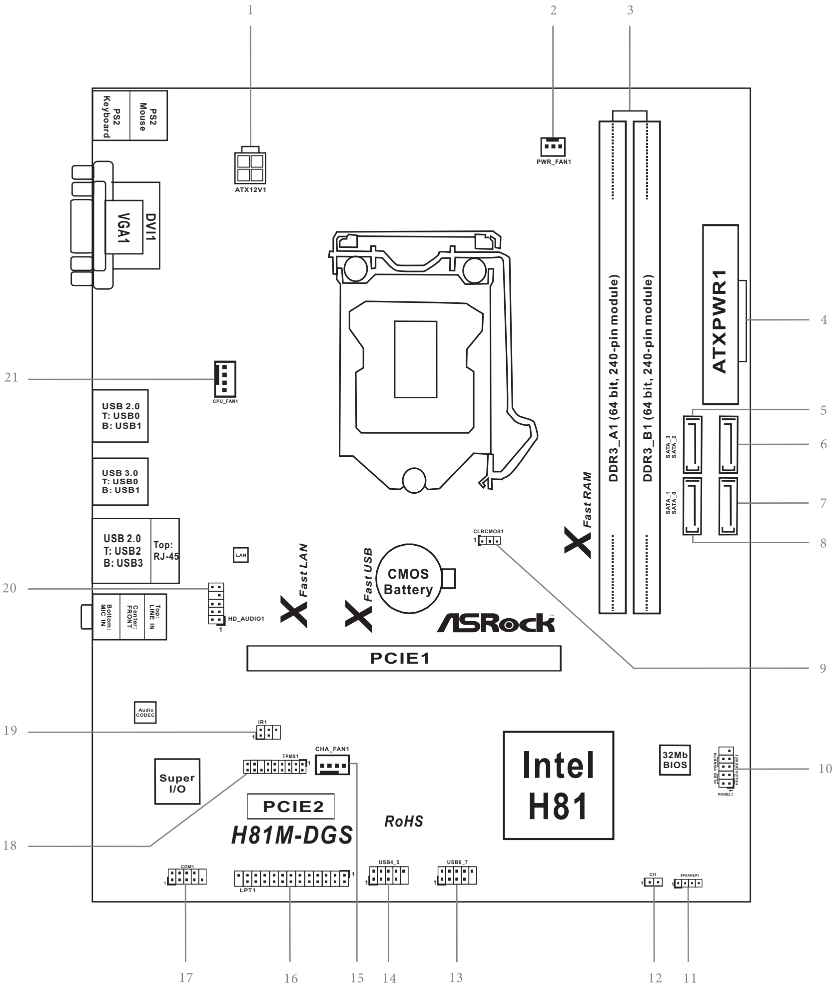
(1) this device may not cause harmful interference, and
(2) this device must accept any interference received, including interference that may cause undesired operation.

CALIFORNIA, USA ONLY

The Lithium battery adopted on this motherboard contains Perchlorate, a toxic substance controlled in Perchlorate Best Management Practices (BMP) regulations passed by the California Legislature. When you discard the Lithium battery in California, USA, please follow the related regulations in advance.
"Perchlorate Material-special handling may apply, see www.dtsc.ca.gov/hazardouswaste/perchlorate"

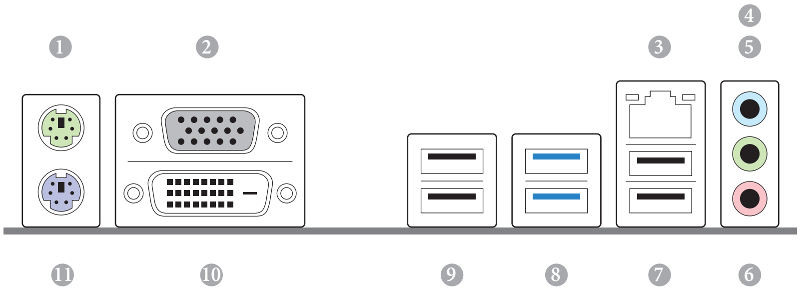
ASRock Website: http://www.asrock.com

Motherboard Layout



No.	Description
1	ATX 12V Power Connector (ATX12V1)
2	Power Fan Connector (PWR_FAN1)
3	2 x 240-pin DDR3 DIMM Slots (DDR3_A1, DDR3_B1)
4	ATX Power Connector (ATXPWR1)
5	SATA2 Connector (SATA_3)
6	SATA2 Connector (SATA_2)
7	SATA3 Connector (SATA_0)
8	SATA3 Connector (SATA_1)
9	Clear CMOS Jumper (CLRCMOS1)
10	System Panel Header (PANEL1)
11	Chassis Speaker Header (SPEAKER1)
12	Chassis Intrusion Header (CI1)
13	USB 2.0 Header (USB6_7)
14	USB 2.0 Header (USB4_5)
15	Chassis Fan Connector (CHA_FAN1)
16	Print Port Header (LPT1)
17	COM Port Header (COM1)
18	TPM Header (TPMS1)
19	Infrared Module Header (IR1)
20	Front Panel Audio Header (HD_AUDIO1)
21	CPU Fan Connector (CPU_FAN1)

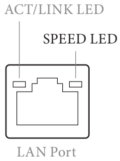
I/O Panel



No.	Description
1	PS/2 Mouse Port
2	D-Sub Port
3	LAN RJ-45 Port*
4	Line In (Light Blue)
5	Front Speaker (Lime)
6	Microphone (Pink)

No.	Description
7	USB 2.0 Ports (USB23)
8	USB 3.0 Ports (USB3_01)
9	USB 2.0 Ports (USB01)
10	DVI-D Port
11	PS/2 Keyboard Port

** There are two LEDs on each LAN port. Please refer to the table below for the LAN port LED indications.*



Activity / Link LED	
Status	**Description**
Off	No Link
Blinking	Data Activity
On	Link

Speed LED	
Status	**Description**
Off	10Mbps connection
Orange	100Mbps connection
Green	1Gbps connection

English

Chapter 1 Introduction

Thank you for purchasing ASRock H81M-DGS motherboard, a reliable motherboard produced under ASRock's consistently stringent quality control. It delivers excellent performance with robust design conforming to ASRock's commitment to quality and endurance.

Because the motherboard specifications and the BIOS software might be updated, the content of this documentation will be subject to change without notice. In case any modifications of this documentation occur, the updated version will be available on ASRock's website without further notice. If you require technical support related to this motherboard, please visit our website for specific information about the model you are using. You may find the latest VGA cards and CPU support list on ASRock's website as well. ASRock website http://www.asrock.com.

1.1 Package Contents

- ASRock H81M-DGS Motherboard (Micro ATX Form Factor)
- ASRock H81M-DGS Quick Installation Guide
- ASRock H81M-DGS Support CD
- 2 x Serial ATA (SATA) Data Cables (Optional)
- 1 x I/O Panel Shield

1.2 Specifications

Platform	• Micro ATX Form Factor • All Solid Capacitor design
CPU	• Supports 4th Generation Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® in LGA1150 Package • 4 Power Phase Design • Supports Intel® Turbo Boost 2.0 Technology
Chipset	• Intel® H81
Memory	• Dual Channel DDR3 Memory Technology • 2 x DDR3 DIMM slots • Supports DDR3 1600/1333/1066 non-ECC, un-buffered memory • Max. capacity of system memory: 16GB (see CAUTION) • Supports Intel® Extreme Memory Profile (XMP)1.3/1.2
Expansion Slot	• 1 x PCI Express 2.0 x16 slot (PCIE1: x16 mode) • 1 x PCI Express 2.0 x1 slot
Graphics	• Intel® HD Graphics Built-in Visuals and the VGA outputs can be supported only with processors which are GPU integrated. • Supports Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video with AVC, MVC (S3D) and MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Max. shared memory 1792MB • Dual VGA output: support DVI-D and D-Sub ports by independent display controllers • Supports DVI-D with max. resolution up to 1920x1200 @ 60Hz • Supports D-Sub with max. resolution up to 1920x1200 @ 60Hz • Supports HDCP function with DVI-D ports

	• Supports Full HD 1080p Blu-ray (BD) playback with DVI-D and ports
Audio	• 5.1 CH HD Audio (Realtek ALC662 Audio Codec)
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • Supports Wake-On-LAN • Supports LAN Cable Detection • Supports Energy Efficient Ethernet 802.3az • Supports PXE
Rear Panel I/O	• 1 x PS/2 Mouse Port • 1 x PS/2 Keyboard Port • 1 x D-Sub Port • 1 x DVI-D Port • 4 x USB 2.0 Ports • 2 x USB 3.0 Ports • 1 x RJ-45 LAN Port with LED (ACT/LINK LED and SPEED LED) • HD Audio Jack: Line in / Front Speaker / Microphone
Storage	• 2 x SATA3 6.0 Gb/s connectors, support NCQ, AHCI and "Hot Plug" functions • 2 x SATA2 3.0 Gb/s connectors, support NCQ, AHCI and "Hot Plug" functions

Connector	• 1 x IR header • 1 x Print Port header • 1 x COM port header • 1 x Chassis Intrusion header • 1 x TPM header • 1 x CPU Fan connector (4-pin) • 1 x Chassis Fan connector (4-pin) • 1 x Power Fan connector (3-pin) • 1 x 24 pin ATX power connector • 1 x 4 pin 12V power connector • 1 x Front panel audio connector • 2 x USB 2.0 headers (support 4 USB 2.0 ports)
BIOS Feature	• 32Mb AMI UEFI Legal BIOS with Multilingual GUI support • ACPI 1.1 Compliance Wake Up Events • SMBIOS 2.3.1 Support • CPU, DRAM, PCH 1.05V, PCH 1.5V Voltage Multi-adjustment
Support CD	• Drivers, Utilities, AntiVirus Software (Trial Version), CyberLink MediaEspresso 6.5 Trial, Google Chrome Browser and Toolbar, Start8
Hardware Monitor	• CPU/Chassis Temperature Sensing • CPU/Chassis/Power Fan Tachometer • CPU/Chassis Quiet Fan (Allow Chassis Fan Speed Auto-Adjust by CPU Temperature) • CPU/Chassis Fan Multi-Speed Control • CASE OPEN detection • Voltage Monitoring: +12V, +5V, +3.3V, CPU Vcore
OS	• Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit compliant
Certifications	• FCC, CE, WHQL • ErP/EuP Ready (ErP/EuP ready power supply is required)

English

** For detailed product information, please visit our website: http://www.asrock.com*

Please realize that there is a certain risk involved with overclocking, including adjusting the setting in the BIOS, applying Untied Overclocking Technology, or using third-party overclocking tools. Overclocking may affect your system's stability, or even cause damage to the components and devices of your system. It should be done at your own risk and expense. We are not responsible for possible damage caused by overclocking.

Due to limitation, the actual memory size may be less than 4GB for the reservation for system usage under Windows® 32-bit operating systems. Windows® 64-bit operating systems do not have such limitations. You can use ASRock XFast RAM to utilize the memory that Windows® cannot use.

1.3 Unique Features

ASRock A-Tuning

A-Tuning is ASRock's multi purpose software suite with a new interface, more new features and improved utilities, including XFast RAM, Dehumidifier, Good Night LED, FAN-Tastic Tuning, OC Tweaker and a whole lot more.

ASRock Instant Flash

ASRock Instant Flash is a BIOS flash utility embedded in Flash ROM. This convenient BIOS update tool allows you to update the system BIOS in a few clicks without preparing an additional floppy diskette or other complicated flash utility. Just save the new BIOS file to your USB storage and launch this tool by pressing <F6> or <F2> during POST to enter the BIOS setup menu to access ASRock Instant Flash. Please be noted that the USB flash drive or hard drive must use FAT32/16/12 file system.

ASRock APP Charger

Simply by installing the ASRock APP Charger makes your iPhone/iPad/iPod Touch charge up to 40% faster than before on your computer. ASRock APP Charger allows you to quickly charge many Apple devices simultaneously and even supports continuous charging when your PC enters into Standby mode (S1), Suspend to RAM (S3), hibernation mode (S4) or power off (S5).

ASRock XFast USB

ASRock XFast USB can boost the performance of your USB storage devices. The performance may depend on the properties of the device.

ASRock XFast LAN

ASRock XFast LAN provides faster internet access, which includes the benefits listed below. LAN Application Prioritization: You can configure your application's priority ideally and add new programs to the list. Lower Latency in Game: After setting online game's priority higher, it can lower the latency in games. Traffic Shaping: You can watch Youtube HD videos and download simultaneously. Real-Time Analysis of Your Data: With the status window, you can easily recognize which data streams you are currently transferring.

ASRock XFast RAM

ASRock XFast RAM is included in A-Tuning. It fully utilizes the memory space that cannot be used under Windows® 32-bit operating systems. ASRock XFast RAM shortens the loading time of previously visited websites, making web surfing faster than ever. And it also boosts the speed of Adobe Photoshop 5 times faster. Another advantage of ASRock XFast RAM is that it reduces the frequency of accessing your SSDs or HDDs in order to extend their lifespan.

ASRock Crashless BIOS

ASRock Crashless BIOS allows users to update their BIOS without fear of failing. If power loss occurs during the BIOS updating process, ASRock Crashless BIOS will automatically finish the BIOS update procedure after regaining power. Please note that BIOS files need to be placed in the root directory of your USB disk. Only USB 2.0 ports support this feature.

ASRock OMG (Online Management Guard)

Administrators are able to establish an internet curfew or restrict internet access at specified times via OMG. You may schedule the starting and ending hours of internet access granted to other users. In order to prevent users from bypassing OMG, guest accounts without permission to modify the system time are required.

ASRock Internet Flash

ASRock Internet Flash downloads and updates the latest UEFI firmware version from our servers for you without entering Windows® OS. Please setup network configuration before using Internet Flash.

ASRock System Browser

ASRock System Browser shows the overview of your current PC and the devices connected.

ASRock Dehumidifier Function

Users may prevent motherboard damages due to dampness by enabling "Dehumidifier Function". When enabling Dehumidifier Function, the computer will power on automatically to dehumidify the system after entering S4/S5 state.

ASRock Easy Driver Installer

For users that don't have an optical disk drive to install the drivers from our support CD, Easy Driver Installer is a handy tool in the UEFI that installs the LAN driver to your system via an USB storage device, then downloads and installs the other required drivers automatically.

ASRock Interactive UEFI

ASRock Interactive UEFI is a blend of system configuration tools, cool sound effects and stunning visuals. The unprecedented UEFI provides a more attractive interface and more amusment.

ASRock Fast Boot

With ASRock's exclusive Fast Boot technology, it takes less than 1.5 seconds to logon to Windows 8 from a cold boot. No more waiting! The speedy boot will completely change your user experience and behavior.

ASRock Restart to UEFI

Windows® 8 brings the ultimate boot up experience. The lightning boot up speed makes it hard to access the UEFI setup. ASRock Restart to UEFI allows users to enter the UEFI automatically when turning on the PC. By enabling this function, the PC will enter the UEFI directly after you restart.

ASRock USB Key

In a world where time is money, why waste precious time everyday typing usernames to log in to Windows? Why should we even bother memorizing those foot long passwords? Just plug in the USB Key and let your computer log in to windows automatically!

ASRock FAN-Tastic Tuning

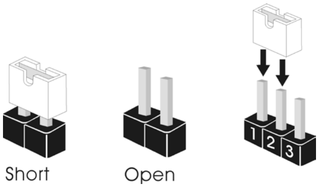
ASRock FAN-Tastic Tuning is included in A-Tuning. Configure up to five different fan speeds using the graph. The fans will automatically shift to the next speed level when the assigned temperature is met.

ASRock Good Night LED

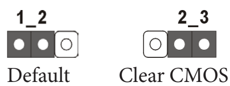
ASRock Good Night LED technology offers you a better sleeping environment by extinguishing the unessential LEDs. By enabling Good Night LED in the BIOS, the Power/HDD/LAN LEDs will be switched off when the system is powered on. Good Night LED will automatically switch off the Power and Keyboard LEDs when the system enters into Standby/Hibernation mode as well.

1.4 Jumpers Setup

The illustration shows how jumpers are setup. When the jumper cap is placed on the pins, the jumper is “Short”. If no jumper cap is placed on the pins, the jumper is “Open”. The illustration shows a 3-pin jumper whose pin1 and pin2 are “Short” when a jumper cap is placed on these 2 pins.



Clear CMOS Jumper
(CLRCMOS1)
(see p.1, No. 9)



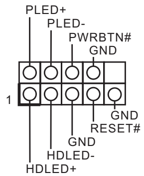
CLRCMOS1 allows you to clear the data in CMOS. To clear and reset the system parameters to default setup, please turn off the computer and unplug the power cord from the power supply. After waiting for 15 seconds, use a jumper cap to short pin2 and pin3 on CLRCMOS1 for 5 seconds. However, please do not clear the CMOS right after you update the BIOS. If you need to clear the CMOS when you just finish updating the BIOS, you must boot up the system first, and then shut it down before you do the clear-CMOS action. Please be noted that the password, date, time, and user default profile will be cleared only if the CMOS battery is removed.

If you clear the CMOS, the case open may be detected. Please adjust the BIOS option “Clear Status” to clear the record of previous chassis intrusion status.

1.5 Onboard Headers and Connectors

Onboard headers and connectors are NOT jumpers. Do NOT place jumper caps over these headers and connectors. Placing jumper caps over the headers and connectors will cause permanent damage to the motherboard.

System Panel Header
(9-pin PANEL1)
(see p.1, No. 10)



Connect the power switch, reset switch and system status indicator on the chassis to this header according to the pin assignments below. Note the positive and negative pins before connecting the cables.

PWRBTN (Power Switch):
Connect to the power switch on the chassis front panel. You may configure the way to turn off your system using the power switch.

RESET (Reset Switch):
Connect to the reset switch on the chassis front panel. Press the reset switch to restart the computer if the computer freezes and fails to perform a normal restart.

PLED (System Power LED):
Connect to the power status indicator on the chassis front panel. The LED is on when the system is operating. The LED keeps blinking when the system is in S1/S3 sleep state. The LED is off when the system is in S4 sleep state or powered off (S5).

HDLED (Hard Drive Activity LED):
Connect to the hard drive activity LED on the chassis front panel. The LED is on when the hard drive is reading or writing data.

The front panel design may differ by chassis. A front panel module mainly consists of power switch, reset switch, power LED, hard drive activity LED, speaker and etc. When connecting your chassis front panel module to this header, make sure the wire assignments and the pin assignments are matched correctly.

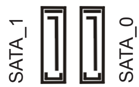
English

Serial ATA2 Connectors
(SATA_2:
see p.1, No. 6)
(SATA_3:
see p.1, No. 5)



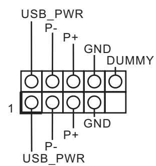
These two SATA2 connectors support SATA data cables for internal storage devices with up to 3.0 Gb/s data transfer rate.

Serial ATA3 Connectors
(SATA_0:
see p.1, No. 7)
(SATA_1:
see p.1, No. 8)



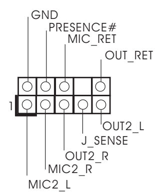
These two SATA3 connectors support SATA data cables for internal storage devices with up to 6.0 Gb/s data transfer rate.

USB 2.0 Headers
(9-pin USB4_5)
(see p.1, No. 14)
(9-pin USB6_7)
(see p.1, No. 13)



Besides four USB 2.0 ports on the I/O panel, there are two headers on this motherboard. Each USB 2.0 header can support two ports.

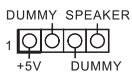
Front Panel Audio Header
(9-pin HD_AUDIO1)
(see p.1, No. 20)



This header is for connecting audio devices to the front audio panel.

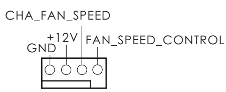
1. *High Definition Audio supports Jack Sensing, but the panel wire on the chassis must support HDA to function correctly. Please follow the instructions in our manual and chassis manual to install your system.*
2. *If you use an AC'97 audio panel, please install it to the front panel audio header by the steps below:*
   A. Connect Mic_IN (MIC) to MIC2_L.
   B. Connect Audio_R (RIN) to OUT2_R and Audio_L (LIN) to OUT2_L.
   C. Connect Ground (GND) to Ground (GND).
   D. MIC_RET and OUT_RET are for the HD audio panel only. You don't need to connect them for the AC'97 audio panel.
   E. To activate the front mic, go to the "FrontMic" Tab in the Realtek Control panel and adjust "Recording Volume".

Chassis Speaker Header
(4-pin SPEAKER1)
(see p.1, No. 11)



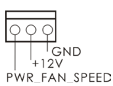
Please connect the chassis speaker to this header.

Chassis and Power Fan Connectors
(4-pin CHA_FAN1)
(see p.1, No. 15)

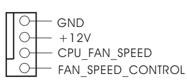


Please connect fan cables to the fan connectors and match the black wire to the ground pin.

(3-pin PWR_FAN1)
(see p.1, No. 2)

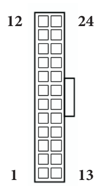


CPU Fan Connectors
(4-pin CPU_FAN1)
(see p.1, No. 21)



This motherboard provides a 4-Pin CPU fan (Quiet Fan) connector. If you plan to connect a 3-Pin CPU fan, please connect it to Pin 1-3.

ATX Power Connector
(24-pin ATXPWR1)
(see p.1, No. 4)



This motherboard provides a 24-pin ATX power connector. To use a 20-pin ATX power supply, please plug it along Pin 1 and Pin 13.

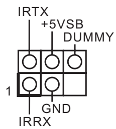
English

ATX 12V Power Connector
(4-pin ATX12V1)
(see p.1, No. 1)



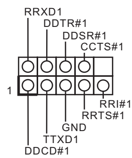
This motherboard provides an 8-pin ATX 12V power connector. To use a 4-pin ATX power supply, please plug it along Pin 1 and Pin 5.

Infrared Module Header
(5-pin IR1)
(see p.1, No. 19)



This header supports an optional wireless transmitting and receiving infrared module.

Serial Port Header
(9-pin COM1)
(see p.1, No. 17)



This COM1 header supports a serial port module.

Chassis Intrusion Header
(2-pin CI1)
(see p.1, No. 12)



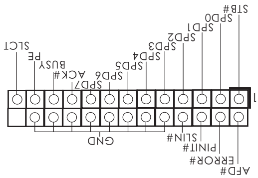
This motherboard supports CASE OPEN detection feature that detects if the chassis cove has been removed. This feature requires a chassis with chassis intrusion detection design.

TPM Header
(17-pin TPMS1)
(see p.1, No. 18)



This connector supports Trusted Platform Module (TPM) system, which can securely store keys, digital certificates, passwords, and data. A TPM system also helps enhance network security, protects digital identities, and ensures platform integrity.

Print Port Header
(25-pin LPT1)
(see p.1, No. 16)



This is an interface for print port cable that allows convenient connection of printer devices.

Technische Daten

Plattform	• Micro-ATX-Formfaktor • Vollständig solides Kondensatordesign
Prozessor	• Unterstützt Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® der 4. Generation im LGA1150-Paket • 4-Leistungsphasendesign • Unterstützt Intel® Turbo Boost 2.0-Technologie
Chipsatz	• Intel® H81
Speicher	• Dualkanal-DDR3-Speichertechnologie • 2 x DDR3-DIMM-Steckplätze • Unterstützt DDR3 1600/1333/1066 non-ECC, ungepufferter Speicher • Systemspeicher, max. Kapazität: 16GB (siehe ACHTUNG) • Unterstützt Intel® Extreme Memory Profile (XMP)1.3/1.2
Erweiterungs-steckplatz	• 1 x PCI-Express 2,0-x16-Steckplatz (PCIE1: x16-Modus) • 1 x PCI-Express 2,0-x1-Steckplatz
Grafikkarte	• Integrierte Intel® HD Graphics-Visualisierung und VGA-Ausgänge können nur mit Prozessoren unterstützt werden, die GPU-integriert sind. • Unterstützt integrierte Intel® HD Graphics-Visualisierung: Intel® Quick Sync Video mit AVC, MVC (S3D) und MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Max. geteilter Speicher: 1792 MB • Doppel-VGA Ausgabe: unterstützt DVI-D und D-Sub Ports durch unabhängige Bildschirmanzeige Kontrolleure • Unterstützt DVI-D mit maximaler Auflösung von 1920 x 1200 bei 60 Hz • Unterstützt D-Sub mit maximaler Auflösung von 1920 x 1200 bei 60 Hz

	• Unterstützt HDCP-Funktion mit DVI-D-Ports • Unterstützt Blu-ray- (BD) Wiedergabe (Full HD/1080p) mit DVI-D-Ports
Audio	• 5.1-Kanal-HD-Audio (Realtek ALC662-Audiocodec)
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • Unterstützt Wake-On-LAN • Unterstützt LAN-Kabelerkennung • Unterstützt energieeffizientes Ethernet 802.3az • Unterstützt PXE
Rückblende, E/A	• 1 x PS/2-Mausanschluss • 1 x PS/2-Tastaturanschluss • 1 x D-Sub-Port • 1 x DVI-D-Port • 4 x USB 2.0-Ports • 2 x USB 3.0-Ports • 1 x RJ-45-LAN-Port mit LED (Aktivität/Verbindung-LED und Geschwindigkeit-LED) • HD-Audioanschluss: Line-in / Vorderer Lautsprecher / Mikrofon
Speicher	• 2 x SATA-III-6,0-Gb/s-Anschlüsse, unterstützt NCQ, AHCI und „Hot-Plugging“-Funktionen • 2 x SATA-II-3,0-Gb/s-Anschlüsse, unterstützt NCQ, AHCI und „Hot-Plugging“-Funktionen
Anschluss	• 1 x IR-Stiftleiste • 1 x Druckanschluss-Stiftleiste • 1 x COM-Anschluss-Stiftleiste • 1 x Gehäuseeingriff-Stiftleiste • 1 x TPM-Stiftleiste • 1 x CPU-Lüfteranschluss (4-polig) • 1 x Gehäuselüfteranschluss (4-polig) • 1 x Netzteillüfteranschluss (3-polig) • 1 x 24-poliger ATX-Netzanschluss • 1 x 4-poliger 12-V-Netzanschluss

	• 1 x Audioanschluss an Frontblende • 2 x USB 2.0-Stiftleisten (unterstützt vier USB 2.0-Ports)
BIOS-Funktion	• 32-Mb-AMI-UEFI-Legal-BIOS mit Unterstützung mehrsprachiger grafischer Benutzerschnittstellen • ACPI 1.1-konforme Aufweckereignisse • SMBIOS 2.3.1-Unterstützung • CPU, DRAM, PCH 1,05 V, PCH 1,5 V / Mehrfachspannungsanpassung
Support-CD	• Treiber, Dienstprogramme, Antivirensoftware (Testversion), CyberLink MediaEspresso 6.5-Testversion, Google Chrome Browser und Toolbar, Start8
Hardware-überwachung	• CPU-/Gehäusetemperaturerkennung • CPU/Gehäuse/Netzteil-Lüftertachometer • Lautloser CPU-/Gehäuselüfter (ermöglicht automatische Anpassung der Geschwindigkeit des Gehäuselüfters über die CPU-Temperatur) • CPU/Gehäuselüfter-Mehrfachgeschwindigkeitssteuerung • Gehäuse-offen-Erkennung • Spannungsüberwachung: +12 V, +5 V, +3,3 V, CPU Vcore
Betriebssystem	• Konform mit Microsoft® Windows® 8 / 8, 64 Bit / 7 / 7, 64 Bit
Zertifizierungen	• FCC, CE, WHQL • ErP/EuP ready (ErP/EuP ready-Netzteil erforderlich)

Spécifications

Plateforme	• Facteur de forme Micro ATX • Conception à condensateurs solides
Processeur	• Prend en charge les processeurs 4ème Génération Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® en package LGA1150 • Alimentation à 4 phases • Prend en charge la technologie Intel® Turbo Boost 2.0
Chipset	• Intel® H81
Mémoire	• Technologie mémoire double canal DDR3 • 2 x fentes DIMM DDR3 • Prend en charge les mémoires sans tampon non ECC DDR3 1600/1333/1066 • Capacité max. de la mémoire système : 16Go (voir AVERTISSEMENT) • Prend en charge Intel® Extreme Memory Profile (XMP)1.3/1.2
Fente d'expansion	• 1 x fente PCI Express 2.0 x 16 (PCIE1: mode x16) • 1 x fente PCI Express 2.0 x 1
Graphiques	• La technologie Intel® HD Graphics Built-in Visuals et les sorties VGA sont uniquement prises en charge par les processeurs intégrant un contrôleur graphique. • Prend en charge la technologie Intel® HD Graphics Built-in Visuals : Intel® Quick Sync Video with AVC, MVC (S3D) and MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Mémoire partagée max. 1792Mo • Output de VGA Duel: supporter DVI-D et D-Sub ports par les controleurs de display independents • Prend en charge le mode DVI-D avec une résolution maximale de 1920x1200 @ 60Hz • Prend en charge le mode D-Sub avec une résolution maximale de 1920x1200 @ 60Hz

	• Prend en charge la fonction HDCP via ports DVI-D • Prend en charge la lecture Blu-ray (BD) Full HD 1080p via ports DVI-D
Audio	• Audio 5.1 CH HD (codec audio Realtek ALC662)
Réseau	• PCIE x1 Gigabit LAN 10/100/1000 Mo/s • Realtek RTL8111G • Prend en charge la fonction Wake-On-LAN • Prise en charge de la détection de câble LAN • Prend en charge la fonction d'économie d'énergie Ethernet 802.3az • Prend en charge PXE
Connectique du panneau arrière	• 1 x port souris PS/2 • 1 x port clavier PS/2 • 1 x port D-Sub • 1 x port DVI-D • 4 x ports USB 2.0 • 2 x ports USB 3.0 • 1 x port RJ-45 LAN avec LED (LED ACT/LIEN et LED VITESSE) • Connecteurs jack audio HD : entrée ligne / haut-parleur avant / microphone
Stockage	• 2 x connecteurs SATA3 6,0 Go/s, compatibles avec les fonctions NCQ, AHCI et « Hot Plug » • 2 x connecteurs SATA2 3,0 Go/s, compatibles avec les fonctions NCQ, AHCI et « Hot Plug »
Connectique	• 1 x embase IR • 1 x embase pour port d'impression • 1 x embase pour port COM • 1 x embase d'intrusion châssis • 1 x embase TPM • 1 x connecteur pour ventilateur de processeur (4 broches) • 1 x connecteur pour ventilateur de châssis (4 broches)

	• 1 x connecteur pour ventilateur d'alimentation (3 broches) • 1 x connecteur d'alimentation ATX 24 broches • 1 x connecteur d'alimentation 12V 4 broches • 1 x connecteur audio panneau frontal • 2 x embases USB 2.0 (pour 4 ports USB 2.0)
BIOS	• BIOS UEFI AMI 32Mo avec prise en charge d'interface graphique multilingue • Compatible ACPI 1.1 Wake Up Events • Prend en charge SMBIOS 2.3.1 • Réglage de la tension CPU, DRAM, PCH 1,05V, PCH 1,5V
CD inclus	• Pilotes, utilitaires, logiciel AntiVirus (version d'évaluation), version d'essai CyberLink MediaEspresso 6.5, navigateur Google Chrome et barre d'outils, Start8
Surveillance du matériel	• Détection de la température du processeur/châssis • Tachéomètre processeur/châssis/ventilateur d'alimentation • Fonction ventilateur silencieux processeur/châssis Quiet Fan (permet au ventilateur du châssis d'adapter sa vitesse de rotation automatiquement en fonction de la température du processeur) • Contrôle simultané des vitesse du ventilateur processeur/châssis • Détection CHASSIS OUVERT • Surveillance de la tension d'alimentation : +12V, +5V, +3,3V, CPU Vcore
Système d'exploitation	• Compatible Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bits
Certifications	• FCC, CE, WHQL • ErP/EuP Ready (alimentation ErP/EuP ready requise)

Specifiche

Piattaforma	• Fattore di forma Micro ATX • Design di condensatore solido
CPU	• Supporta Intel® Core™ i7 / i5 / i3 di 4a generazione / Xeon® / Pentium® / Celeron® in LGA1150 Package • 4 Power Phase Design • Supporta la tecnologia Intel® Turbo Boost 2.0
Chipset	• Intel® H81
Memoria	• Tecnologia con memoria DDR3 a doppio canale • 2 x slot DIMM DDR3 • Supporta la memoria DDR3 1600/1333/1066 non ECC, senza buffer • Capacità max. della memoria di sistema: 16GB (si veda la sezione ATTENZIONE) • Supporta Intel® Extreme Memory Profile (XMP)1.3/1.2
Slot di espansione	• 1 x PCI Express 2.0 x16 slot (PCIE1: modalità x16) • 1 x PCI Express 2.0 x1 slot
Grafica	• La videografica integrata della scheda video HD Intel® e le uscite VGA possono essere supportate soltanto con processori con GPU integrata. • Supporta la videografica integrata della scheda video HD Intel®: Intel® Quick Sync Video con AVC, MVC (S3D) e MPEG-2 Full HW Encode1, Intel® InTru™ 3D, tecnologia Intel® Clear Video HD, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Memoria condivisa max. 1792 MB • Uscita VGA Doppia: supporto porte DVI-D e D-Sub tramite verifi catore display indipendente • Supporta DVI-D con una risoluzione max. fino a 1920 x 1200 a 60 Hz • Supporta D-Sub con una risoluzione max. fino a 1920 x 1200 a 60 Hz

Italiano

	• Supporta la funzione HDCP con porte DVI-D • Supporta Blu-ray (BD) Full HD 1080p, riproduzione con porte DVI-D
Audio	• Audio HD a 5.1 canali (codec audio Realtek ALC662)
LAN	• PCIE x 1 LAN Gigabit 10/100/1000 Mb/s • Realtek RTL8111G • Supporta Wake-On-LAN • Supporta il rilevamento cavo LAN • Supporta Energy Efficient Ethernet 802.3az • Supporta PXE
I/O pannello posteriore	• 1 x porta mouse PS/2 • 1 x porta tastiera PS/2 • 1 x porta D-Sub • 1 x porta DVI-D • 4 x porte USB 2.0 • 2 x porte USB 3.0 • 1 x porta LAN RJ-45 con LED (ACT/LINK LED e SPEED LED) • Jack audio HD: ingresso linea/altoparlante anteriore/ microfono
Archiviazione	• 2 x connettori SATA3 6,0 Gb/s, supporta le funzioni NCQ, AHCI e “Hot Plug” • 2 x connettori SATA2 3,0 Gb/s, supporta le funzioni NCQ, AHCI e “Hot Plug”
Connettore	• 1 x header IR • 1 x header porta stampa • 1 x header porta COM • 1 x header di intrusione nello chassis • 1 x header TPM • 1 x connettore ventola CPU (4 pin) • 1 x connettore ventola chassis (4 pin) • 1 x connettore ventola alimentazione (3 pin) • 1 x connettore alimentazione ATX a 24 pin • 1 x connettore alimentazione da 12 V a 4 pin • 1 x connettore audio pannello anteriore • 2 x header USB 2.0 (supporto 4 porte USB 2.0)

Caratteristiche del BIOS	• BIOS legale 32 Mb AMI UEFI con supporto GUI multilingue • Eventi di wake up conformi ad ACPI 1.1 • Supporto SMBIOS 2.3.1 • Multiregolazione tensione CPU, DRAM, PCH 1,05 V, PCH 1,5 V
CD di supporto	• Driver, utilità, software antivirus (versione di prova), versione di prova di CyberLink MediaEspresso 6.5, browser e barra degli strumenti Google Chrome, Start8
Hardware Monitor	• Sensore temperatura CPU/chassis • Tachimetro CPU/chassis/ventola alimentazione • Ventola silenziosa CPU/chassis (consente l'autoregolazione della velocità della ventola dello chassis mediante la temperatura della CPU) • Controllo multivelocità della ventola di CPU/chassis • Rilevamento CASE OPEN • Monitoraggio tensione: +12 V, +5 V, +3,3 V, CPU Vcore
SO	• Microsoft® Windows® 8/8 a 64-bit/7/conforme a 7 a 64-bit
Certificazioni	• FCC, CE, WHQL • ErP/EuP Ready (è necessaria alimentazione ErP/EuP ready)

Especificaciones

Plataforma	• Factor de forma Micro ATX • Diseño de los Condensadores: All Solid
CPU	• Compatible con 4.ª Generación de Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® en paquete LGA1150 • Diseño de 4 fases de alimentación • Compatible con la tecnología de Intel® Turbo Boost 2.0
Conjunto de chips	• Intel® H81
Memoria	• Tecnología de memoria de Doble Canal DDR3 • 2 ranuras DDR3 DIMM • Compatible con memoria no-ECC, sin búfer DDR3 1600/1333/1066 • Capacidad máxima de la memoria del sistema: 16GB (consulte la ADVERTENCIA) • Compatible con Extreme Memory Profile (XMP)1.3/1.2 de Intel®
Ranura de expansión	• 1 ranura PCI Express 2.0 x16 (PCIE1: modo x16) • 1 ranura PCI Express 2.0 x1
Gráficos	• La Tecnología visual integrada de gráficos HD de Intel® y las salidas de VGA son compatibles únicamente con procesadores con GPU integrado. • Compatible con la Tecnología visual integrada de gráficos HD de Intel®: Intel® Quick Sync Video con AVC, MVC (S3D) y MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Memoria compartida máxima: 1792MB • Salida de VGA dual: apoya los puertos de DVI-D y de D-Sub por los reguladores independientes de la exhibición • Compatible con DVI-D con máxima resolución hasta 1920x1200 @ 60Hz • Compatible con D-Sub con máxima resolución hasta 1920x1200 @ 60Hz

Español

	• Compatible con función HDCP con puertos DVI-D • Compatible con reproducción Blu-ray (BD) Full HD de 1080p con puertos DVI-D
Audio	• 5.1 Audio CH HD (Realtek ALC662 Audio Codec)
LAN	• 1 LAN Gigabit PCIE 10/100/1000 Mb/s • Realtek RTL8111G • Compatible con Wake-On-LAN • Admite detección de conexión de cable LAN • Compatible con Ethernet de consumo eficiente de energía 802.3az • Compatible con PXE
Panel trasero I/O	• 1 puerto de ratón PS/2 • 1 puerto de teclado PS/2 • 1 puerto D-Sub • 1 puerto DVI-D • 4 puertos USB 2.0 • 2 puertos USB 3.0 • 1 puerto LAN RJ-45 con LED (ACT/LINK LED y SPEED LED) • Conector de audio HD: Entrada de línea / Altavoz frontal / Micrófono
Almace-namiento	• 2 conectores SATA3 de 6,0 Gb/s, compatibles con las funciones NCQ, AHCI y "Hot Plug" • 2 conectores SATA2 de 3,0 Gb/s, compatibles con las funciones NCQ, AHCI y "Hot Plug"
Conectores	• 1 cabezal IR • 1 cabezal de puerto de impresión • 1 cabezal de puerto COM • 1 cabezal de intrusión de chasis • 1 cabezal TPM • 1 conector de ventilador de la CPU (de 4 pines) • 1 conector de ventilador del chasis (de 4 pines)

	• 1 conector de ventilador de alimentación (de 3 pines) • 1 conector de alimentación ATX de 24 pines • 1 conector de alimentación de 12V de 4 pines • 1 conector de audio del panel frontal • 2 cabezales USB 2.0 (compatibles con 4 puertos USB 2.0)
Características del BIOS	• BIOS legal UEFI AMI de 32Mb compatible con interfaz gráfica de usuario multilingüe • Eventos de reactivación conformes con ACPI 1.1 • Compatible con SMBIOS 2.3.1 • Multiajuste de voltaje de CPU, DRAM, PCH 1,05V, PCH 1,5V
CD de soporte	• Controladores, Utilidades, Software AntiVirus (Versión de prueba), Versión de prueba de CyberLink MediaEspresso 6.5, Explorador y Barra de herramientas de Google Chrome y Start8
Monitor del hardware	• Método de sensor de temperatura de la CPU/Chasis • Tacómetro del ventilador de alimentación/CPU/Chasis • Ventilador silencioso de la CPU/Chasis (permite ajustar automáticamente la velocidad del ventilador del chasis mediante la temperatura de la CPU) • Control multivelocidad del ventilador de la CPU/Chasis • Detección de CUBIERTA ABIERTA • Control del voltaje: +12V, +5V, +3,3V, CPU Vcore
SO	• Compatible con Microsoft® Windows® 8 / 8 de 64 bits / 7 / 7 de 64 bits
Certificaciones	• FCC, CE, WHQL • Compatible con ErP/EuP (requiere toma de alimentación compatible con ErP/EuP)

Спецификация

Платформа	• Форм-фактор Micro ATX • Использование только твердотельных конденсаторов
ЦП	• Поддержка процессоров 4-го поколения Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® в исполнении LGA1150 • Система питания 4 • Поддержка технологии Intel® Turbo Boost 2.0
Чипсет	• Intel® H81
Память	• Двухканальная память DDR3 • 2 x гнездо DDR3 DIMM • Поддержка модулей памяти DDR3 1600/1333/1066 Non-ECC Unbuffered • Максимальный объем системной памяти: 16 Гб (см. «ПРЕДОСТЕРЕЖЕНИЕ») • Поддержка Intel® Extreme Memory Profile (XMP)1.3/1.2
Гнезда расширения	• 1 x PCI Express 2.0 x16 гнезд (PCIE1: режим x16) • 1 x PCI Express 2.0 x1 гнезд
Графическая система	• Поддержка выходных сигналов Intel® HD Graphics Built-in Visuals и VGA возможна только при использовании процессоров со встроенными графическими процессорами. • Поддержка Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video с AVC, MVC (S3D) и MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Clear Video HD Technology, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Максимальный объем совместно используемой памяти: 1792 Мб • Двойственное VGA выходное устройство: поддерживает DVI-D и D-Sub порты через независимый контроллер дисплея • Поддержка DVI-D с максимальным разрешением до 1920x1200 при 60 Гц • Поддержка D-Sub с максимальным разрешением до 1920x1200 при 60 Гц

Русский

	• Поддержка функции HDCP через порты DVI-I • Поддержка воспроизведения Full HD 1080p Blu-ray (BD) через порты DVI-D
Аудио	• 5.1-канальный звук высокой четкости HD Audio (аудиокодек Realtek ALC662)
ЛВС	• PCIE x1 Gigabit LAN 10/100/1000 Мб/с • Realtek RTL8111G • Поддержка Wake-On-LAN • Поддержка определения кабеля ЛВС • Поддержка Energy Efficient Ethernet 802.3az • Поддержка PXE
Порты ввода-вывода на задней панели	• 1 x PS/2 мышь • 1 x PS/2 для клавиатуры • 1 x D-Sub • 1 x DVI-D • 4 x USB 2.0 • 2 x USB 3.0 • 1 x RJ-45 для ЛВС с СИД (СИД ACT/LINK и МИД SPEED) • Разъемы HD Audio: линейный вход / передние динамики / микрофон
Запоминающие устройства	• 2 x разъем SATA3 6,0 Гб/с, поддержка функций NCQ, AHCI и «горячей» замены • 2 x разъем SATA2 3,0 Гб/с, поддержка функций NCQ, AHCI и «горячей» замены
Разъемы	• 1 x колодка IR • 1 x колодка порта принтера • 1 x колодка COM-порта • 1 x колодка для датчика вскрытия корпуса • 1 x колодка TPM • 1 x разъем для вентилятора ЦП (4-контактный) • 1 x разъем для вентилятора корпуса (4-контактный) • 1 x разъем для вентилятора блока питания (3-контактный)

	• 1 x разъем питания ATX (24-контактный) • 1 x 4-контактный разъем питания 12 В • 1 x аудиоразъем на передней панели • 2 x колодки USB 2.0 (поддержка 4 портов USB 2.0)
Особенности BIOS	• 32 Мб AMI UEFI Legal BIOS с поддержкой многоязычного ГИП • Совместимость с управлением энергопотреблением по ACPI 1.1 • Поддержка SMBIOS 2.3.1 • Регулировка напряжений ЦП, DRAM, PCH 1,05 В, PCH 1,5 В
Диск с ПО	• Драйвера, утилиты, антивирусное ПО (демоверсия), CyberLink MediaEspresso 6.5 (демоверсия), браузер и панель инструментов Google Chrome, Start8
Контроль оборудования	• Датчик температуры ЦП/корпуса питания • Тахометр вентиляторов ЦП/корпуса/блока питания • Малошумящий вентилятор ЦП/корпуса (с автоматической регулировкой оборотов по температуре ЦП) • Управление оборотами вентилятора ЦП/корпуса • Технология определения вскрытия корпуса • Контроль напряжения: +12 В, +5 В, +3,3 В, ЦП Vcore
ОС	• Microsoft® Windows® 8 / 8 64-разрядная / 7 / 7 64-разрядная
Сертификация	• FCC, CE, WHQL • Совместимость с ErP/EuP (необходим блок питания, соответствующий стандарту ErP/EuP)

Especificações

Plataforma	• Formato Micro ATX • Design de condensador sólido
CPU	• Suporta processadores Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® de 4ª geração em socket LGA1150 • Design com 4 fases de alimentação • Suporta a tecnologia Intel® Turbo Boost 2.0
Chipset	• Intel® H81
Memória	• Tecnologia de memória DDR3 de dois canais • 2 x ranhuras DIMM DDR3 • Suporta memória DDR3 1600/1333/1066, não ECC, sem memória intermédia • Capacidade máxima da memória do sistema: 16GB (consultar AVISO) • Suporta Extreme Memory Profile (XMP)1.3/1.2 da Intel®
Ranhuras de expansão	• 1 x ranhura PCI Express 2.0 x16 (PCIE1: modo x16) • 1 x ranhura PCI Express 2.0 x1
Gráficos	• Os gráficos incorporados Intel® HD e as saídas VGA apenas podem ser suportados com processadores com GPU integrada. • Suporta gráficos incorporados Intel® HD: Intel® Quick Sync Video com AVC, MVC (S3D) e MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Tecnologia Intel® Clear Video HD, Intel® Insider™, Gráficos Intel® HD 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Memória partilhada máxima de 1792MB • Porta de saída VGA dupla: suporta portas DVI-D e D-Sub através de controladores de visualização independentes • Suporta DVI-D com resolução máxima de até 1920x1200 @ 60Hz • Suporta D-Sub com resolução máxima de até 1920x1200 @ 60Hz • Suporta a função HDCP com portas DVI-D e • Suporta reprodução Blu-ray (BD) Full HD a 1080p com portas DVI-D
Áudio	• Áudio HD de 5.1 canais (Codec de áudio Realtek ALC662)

LAN	• LAN Gigabit 10/100/1000 Mb/s PCIE x1 • Realtek RTL8111G • Suporta Wake-On-LAN • Suporta Detecção de cabo LAN • Suporta IEEE 802.3az • Suporta PXE
E/S do painel traseiro	• 1 x Porta PS/2 para mouse • 1 x Porta PS/2 para teclado • 1 x Porta D-Sub • 1 x Porta DVI-D • 4 x portas USB 2.0 • 2 x portas USB 3.0 • 1 x Porta LAN RJ-45 com LED (LED ACT/LIGAÇÃO e LED DE VELOCIDADE) • Ficha de áudio HD: Entrada de linha / Altifalante frontal / Microfone
Armazenamento	• 2 x conectores SATA3 a 6,0 Gb/s, com suporte para NCQ, AHCI e funções "Hot Plug" • 2 x conectores SATA2 a 3,0 Gb/s, com suporte para NCQ, AHCI e funções "Hot Plug"
Conector	• 1 x Terminal IR • 1 x Terminal de porta de impressão • 1 x Terminal de porta COM • 1 x Terminal de intrusão no chassis • 1 x Terminal TPM • 1 x Conector da ventoinha da CPU (4 pinos) • 1 x Conector da ventoinha do chassis (4 pinos) • 1 x Conector da ventoinha de alimentação (3 pinos) • 1 x conector de alimentação de 24 pinos ATX • 1 x conector de alimentação de 12V de 4 pinos • 1 x conector de áudio do painel frontal • 2 x terminais USB 2.0 (suporte para 4 portas USB 2.0)
Funcionalidades da BIOS	• BIOS UEFI oficial da AMI com 32Mb com suporte de interface multilíngue • Eventos de reactivação compatíveis com ACPI 1.1 • Suporta SMBIOS 2.3.1 • Multi-ajuste de tensão de CPU, DRAM, PCH 1,05V, PCH 1,5V

Português

CD de suporte	• Controladores, Utilitários, Software antivírus (versão de avaliação), CyberLink MediaEspresso 6.5 - Versão de avaliação, Navegador e Barra de Ferramentas Google Chrome, Start8
Monitor de Hardware	• Sensor de temperatura de CPU/Chassis • Taquímetro de ventoinha de CPU/Chassis/Alimentação • Ventoinha de CPU/Chassis silenciosa (Permite o ajuste automático da velocidade da ventoinha do chassis através da temperatura da CPU) • Controlo de velocidade da ventoinha de CPU/Chassis • Detecção de ABERTURA da CAIXA • Monitorização da tensão: +12V, +5V, +3,3V, CPU Vcore
Sistema Operativo	• Compatível com Microsoft® Windows® 8 / 8 64-bits / 7 / 7 64-bits
Certificações	• FCC, CE, WHQL • Preparada para ErP/EuP (é necessária uma fonte de alimentação preparada para ErP/EuP)

Özellikler

Platform	• Micro ATX Form Faktörü • Tam Katı Bağlayıcı tasarımı
CPU	• 4ncü Nesil Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron®, LGA1150 Paketinde desteklemektedir • 4 Güç Safhası Tasarımı • Intel® Turbo Boost 2.0 Teknolojisini destekler
Yonga kümesi	• Intel® H81
Bellek	• Çift Kanallı DDR3 Bellek Teknolojisi • 2 x DDR3 DIMM yuvaları • DDR3 1600/1333/1066 ECC olmayan, ara belleğe alınmamış belleği destekler • Maksimum sistem belleği kapasitesi: 16GB (bkz. DİKKAT ikazı) • Intel® Üstün Bellek Profili (XMP)1.3/1.2 özelliğini destekler
Genişletme Yuvası	• 1 x PCI Express 2.0 x16 yuva (PCIE1: x16 modu) • 1 x PCI Express 2.0 x1
Grafikler	• Intel® HD Graphics Dahili Görselleri ile VGA çıktıları, yalnızca GPU entegre edilmiş işlemciler ile desteklenir. • Intel® HD Graphics Dahili Görsellerini destekler : AVC, MVC (S3D) ve MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Intel® Net Video HD Teknolojisi, Intel® Insider™, Intel® HD Graphics 4400/4600 ile Intel® Quick Sync Video • Pixel Shader 5.0, DirectX 11.1 • Maksimum paylaşılan bellek 1792MB • Çift VGA Çıkış: desteği DVI-D ve bağımsız görüntü denetleyiciler tarafından D-Sub bağlantı noktaları • 1920x1200 @ 60Hz'ye kadar DVI-D işlevini destekler • 1920x1200 @ 60Hz'ye kadar çözünürlükle D-Sub işlevini destekler • DVI-D bağlantı noktaları ile HDCP işlevini destekler • DVI-D bağlantı noktalarıyla, Full HD 1080p Blu-ray (BD) kayıttan yürütme özelliklerini destekler
Ses	• 5.1 CH HD Ses (Realtek ALC662 Ses Codec Bileşeni)

LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • LAN Açılışını Destekler • LAN Kablo Algılama'yı destekler • Enerji Verimliliğine Sahip Ethernet 802.3az işlevini destekler • PXE özelliğini destekler
Arka Panel I/O	• 1 x PS/2 Fare Bağlantı Noktası • 1 x PS/2 Klavye Bağlantı Noktası • 1 x D-Sub Bağlantı Noktası • 1 x DV-D Bağlantı Noktası • 4 x USB 2.0 Bağlantı noktası • 2 x USB 3.0 Bağlantı noktası • LED'e sahip 1 x RJ-45 LAN Bağlantı Noktası (ACT/LINK LED ve SPEED LED) • HD Ses Jakı: Hat Girişi / Ön Hoparlör / Mikrofon
Depolama	• 2 x SATA3 6,0 Gb/s bağlayıcıları NCQ, AHCI ve "Hot Plug" işlevlerini destekler • 2 x SATA2 3,0 Gb/s bağlayıcıları NCQ, AHCI ve "Hot Plug" işlevlerini destekler
Bağlayıcı	• 1 x IR bağlantısı • 1 x Yazdırma Bağlantı noktası bağlantısı • 1 x COM Bağlantı noktası bağlantısı • 1 x Kasa Yetkisiz Erişim bağlantısı • 1 x TPM bağlantısı • 1 x CPU Fan bağlayıcısı (4-pin) • 1 x Kasa Fanı bağlayıcısı (4-pin) • 1 x Güç Fanı bağlayıcısı (3-pin) • 1 x 24 pin ATX güç bağlayıcısı • 1 x 4 pin 12V güç bağlayıcısı • 1 x Ön panel ses bağlayıcısı • 2 x USB 2.0 bağlantısı (4 USB 2.0 bağlantı noktasını destekler)
BIOS Özelliği	• Çok dilli GUI Desteği ile 32Mb AMI UEFI Legal BIOS • ACPI 1.1 Uyumluluğu Uyandırma Olayları • SMBIOS 2.3.1 Desteği • CPU, DRAM, PCH 1,05V, PCH 1,5V Voltaj Çoklu Ayarı

Destek CD'si	• Sürücüler, Yardımcı Yazılımlar, AntiVirüs Yazılımı (Deneme Sürümü), CyberLink MediaEspresso 6.5 Deneme Sürümü, Google Chrome Tarayıcı ve Araç Çubuğu, Start8
Donanım Monitörü	• CPU/Kasa Sıcaklığı Tespiti • CPU/Kasa/Güç Fanı Devirölçer • CPU/Kasa Sessiz Fan (Kasa Fan Hızının CPU Sıcaklığına Göre Otomatik olarak Ayarlanmasını Sağlar) • CPU/Kasa Fanı Çoklu Hız Kontrolü • KASA AÇIK algılaması • Voltaj Denetleme: +12V, +5V, +3,3V, CPU Vcore
OS	• Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit ile uyumlu
Belgeler	• FCC, CE, WHQL • ErP/EuP için hazır (ErP/EuP için hazır güç beslemesi gereklidir)

규격

플랫폼

- Micro ATX 폼 팩터
- 모든 솔리드 콘덴서 구조

CPU

- LGA1150 패키지로 제공되는 4 세대 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® 지원
- 4 개 전원 위상 구조
- Intel® Turbo Boost 2.0 기술 지원

칩세트

- Intel® H81

메모리

- 듀얼 채널 DDR3 메모리 기술
- DDR3 DIMM 슬롯 2 개
- DDR3 1600/1333/1066 비 -ECC, 비버퍼링 메모리 지원
- 시스템 메모리 최대 용량 : 16GB (주의 참조)
- Intel® Extreme Memory Profile (XMP)1.3/1.2 지원

확장 슬롯

- PCI Express 2.0 x16 슬롯 1 개 (PCIE1: x16 모드)
- PCI Express 2.0 x1 슬롯 1 개

그래픽

- Intel® HD 그래픽스 빌트 - 인 비주얼과 VGA 출력은 GPU 통합 프로세서로만 지원할 수 있습니다 .
- Intel® HD 그래픽스 빌트 - 인 비주얼 지원 : AVC, MVC (S3D) 및 MPEG-2 풀 HW Encode1 지원 Intel® Quick Sync Video, Intel® InTru™ 3D, Intel® 클리어 비디오 HD 기술 , Intel® Insider™, Intel® HD 그래픽스 4400/4600
- Pixel Shader 5.0, DirectX 11.1
- 최대 공유 메모리 1792MB
- 더블 VGA 수출 : DVI-D 와 D-Sub 포트 독립 디스플레이 컨트롤러를 지원
- DVI-D 지원 (최대 해상도 1920x1200 @ 60Hz)
- D-Sub 지원 (최대 해상도 1920x1200 @ 60Hz)
- DVI-D 포트를 이용한 HDCP 기능 지원
- DVI-D 포트를 이용한 Full HD 1080p Blu-ray (BD) 재생 지원

오디오	• 5.1 CH HD 오디오 지원 (Realtek ALC662 오디오 코덱)
LAN	• PCIE 1 개 , Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • Wake-On-LAN 지원 • LAN 케이블 감지 지원 • 절전형 이더넷 802.3az 지원 • PXE 지원
후면 패널 I/O	• PS/2 마우스 포트 1 개 • PS/2 키보드 포트 1 개 • D-Sub 포트 1 개 • DVI-D 포트 1 개 • USB 2 포트 4 개 • USB 3 포트 2 개 • LED 장착 RJ-45 LAN 포트 1 개 (ACT/LINK LED 및 SPEED LED) • HD 오디오 잭 : 라인 입력 / 전면 스피커 / 마이크
저장 장치	• SATA3 6.0 Gb/s 커넥터 2 개 , NCQ, AHCI 및 핫 플러그 기능 지원 • SATA2 3.0 Gb/s 커넥터 2 개 , NCQ, AHCI 및 핫 플러그 기능 지원
커넥터	• IR 헤더 1 개 • 인쇄 포트 헤더 1 개 • COM 포트 헤더 1 개 • 섀시 침입 헤더 1 개 • TPM 헤더 1 개 • CPU 팬 커넥터 1 개 (4 핀) • 섀시 팬 커넥터 1 개 (4 핀) • 전원 팬 커넥터 1 개 (3 핀) • 24 핀 ATX 전원 커넥터 1 개 • 4 핀 12V 전원 커넥터 1 개 • 전면 패널 오디오 커넥터 1 개 • USB 2.0 헤더 2 개 (USB 2.0 포트 4 개 지원)

BIOS 기능	• 다국어 GUI 지원을 제공하는 32Mb AMI UEFI 적합형 BIOS • ACPI 1.1 준수 웨이크 업 이벤트 • SMBIOS 2.3.1 지원 • CPU, DRAM, PCH 1.05V, PCH 1.5V 전압 다중 조정
지원 CD	• 드라이버 , 유틸리티 , 백신 소프트웨어 (시험판), CyberLink MediaEspresso 6.5 시험판 , Google Chrome 브라우저 및 툴바 , Start8
하드웨어 모니터	• CPU/ 섀시 온도 감지 • CPU/ 섀시 / 전원 팬 타코미터 • CPU/ 섀시 저소음 팬 (CPU 온도에 의한 섀시 팬 속도 자동 조정) • CPU/ 섀시 팬 다중 속도 조절 • 케이스 열림 감지 • 전압 모니터링 : +12V, +5V, +3.3V, CPU Vcore
OS	• Microsoft® Windows® 8 / 8 64 비트 / 7 / 7 64 비트 호환
인증	• FCC, CE, WHQL • ErP/EuP 사용 가능 (ErP/EuP 사용 가능 전원공급장치 필요)

仕様

プラットフォーム	• マイクロ ATX フォームファクター • オール固体コンデンサー設計
CPU	• LGA1150 パッケージでは、第 4 世代の Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® をサポート • 4 電源フェーズ設計 • Intel® ターボブースト 2.0 テクノロジーをサポート
チップセット	• Intel® H81
メモリ	• デュアルチャンネル DDR3 メモリテクノロジー • 2 x DDR3 DIMM スロット • DDR3 1600/1333/1066 ECC なし、アンバッファードメモリをサポート • システムメモリの最大容量： 16GB （注意を参照） • Intel® エクストリームメモリプロファイル（XMP）1.3/1.2 をサポート
拡張スロット	• 1 x PCI Express 2.0 x16 スロット（PCIE1： x16 モード） • 1 x PCI Express 2.0 x1 スロット
グラフィックス	• Intel®HD グラフィックス内蔵ビジュアルおよび VGA 出力は、GPU に統合されたプロセッサーのみでサポートされます。 • Intel®HD グラフィックス内蔵ビジュアルをサポート： AVC、MVC (S3D)、MPEG-2 フル HW エンコード 1 の Intel® Quick Sync Video、Intel® InTru™ 3D、Intel® クリアビデオ HD テクノロジー、Intel® インサイダー ™、Intel® HD グラフィックス 4400/4600 • ピクセルシェーダー 5.0、DirectX 11.1 • 最大共有メモリ 1792MB • デュアル VGA 出力 : 独立型ディスプレイコントローラによる DVI-D および D-Sub ポートサポート • DVI-D をサポート。 最大解像度 1920x1200 @60Hz • D-Sub をサポート。 最大解像度 1920x1200 @60Hz • DVI-D ポートで、HDCP 機能をサポート • DVI-D ポートで、フル HD 1080p ブルーレイ (BD) 再生をサポート

音声	• 5.1 CH HD オーディオ（Realtek ALC662 オーディオコーデック）
LAN	• PCIE x1 ギガビット LAN 10/100/1000 Mb/ 秒 • Realtek RTL8111G • ウェイクオンランをサポート • LAN ケーブル検出をサポート • エネルギー効率のよいイーサネット 802.3az をサポート • PXE をサポート
リアパネル I/O	• 1 x PS/2 マウスポート • 1 x PS/2 キーボードポート • 1 x D-Sub ポート • 1 x DVI-D ポート • 4 x USB 2.0 ポート • 2 x USB 3.0 ポート • LED 付き 1 x RJ-45 LAN ポート（ACT/LINK LED と SPEED LED） • HD オーディオジャック： ラインイン / フロントスピーカー / マイク
ストレージ	• 2 x SATA3 6.0 Gb/ 秒コネクター、NCQ、AHCI、「ホットプラグ」機能をサポート • 2 x SATA2 3.0 Gb/ 秒コネクター、NCQ、AHCI、「ホットプラグ」機能をサポート
コネクター	• 1 x IR ヘッダー • 1 x プリントポートヘッダー • 1 x COM ポートヘッダー • 1 x シャーシイントルージョンヘッダー • 1 x TPM ヘッダー • 1 x CPU ファインコネクター（4 ピン） • 1 x シャーシファンコネクター（4 ピン） • 1 x 電源ファンコネクター（3 ピン） • 1 x 24 ピン ATX 電源コネクター • 1 x 4 ピン 12V 電源コネクター • 1 x 前面パネルオーディオコネクター • 2 x USB 2.0 ヘッダー（4 つの USB 2.0 ポートをサポート）

BIOS 機能	• 多言語 GUI サポート付きの 32Mb AMI UEFI Legal BIOS • ACPI 1.1 準拠のウェイクアップイベント • SMBIOS 2.3.1 をサポート • CPU、DRAM、PCH 1.05V、PCH 1.5V 複数電圧設定
サポート CD	• ドライバー、ユーティリティ、アンチウイルスソフトウェア（トライアル版）、CyberLink MediaEspresso 6.5 トライアル、Google Chrome ブラウザー、ツールバー、Start8
ハードウェアモニター	• CPU/ シャーシ温度センサー • CPU/ シャーシ / 電源ファンタコメーター • CPU/ シャーシ静音ファン（CPU 温度によるシャーシファン速度の自動調整可能） • CPU/ シャーシファンマルチ速度制御 • ケース開閉検知 • 電圧監視： +12V、+5V、+3.3V、CPU Vcore
OS	• Microsoft® Windows® 8 / 8 64 ビット / 7 / 7 64 ビット準拠
認証	• FCC、CE、WHQL • ErP/EuP Ready（ErP/EuP ready 電源が必要です）

规格

平台	• Micro ATX 规格尺寸 • 全固态电容器设计
CPU	• 支持 LGA1150 封装第 4 代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® • 4 电源相设计 • 支持 Intel® Turbo Boost 2.0 技术
芯片集	• Intel® H81
内存	• 双通道 DDR3 内存技术 • 2 x DDR3 DIMM 槽 • 支持 DDR3 1600/1333/1066 非 ECC，非缓冲内存 • 支持系统内存容量： 16GB （见“注意”） • 支持 Intel® Extreme Memory Profile (XMP)1.3/1.2
扩充槽	• 1 x PCI Express 2.0 x16 槽 (PCIE1: x16 模式) • 1 x PCI Express 2.0 x1 槽
图形	• 只有 GPU 集成的处理器才支持 Intel® HD Graphics 内置视效和 VGA 输出。 • 支持 Intel® HD Graphics 内置视效 : Intel® 快速同步视频，采用 AVC、MVC (S3D) 和 MPEG-2 Full HW Encode1、Intel® InTru™ 3D、Intel® Clear Video HD 技术、Intel® Insider™、Intel® HD Graphics 4400/4600 • Pixel Shader 5.0、DirectX 11.1 • 最大共享内存 1792MB • 雙 VGA 輸出 : 通過獨立顯示控制器提供 DVI-D 和 D-Sub 接口 • 支持 DVI-D，60Hz 时最大分辨率达 1920x1200 • 支持 D-Sub，60Hz 时最大分辨率达 1920x1200 • 通过 DVI-D 端口支持 HDCP 功能 • 通过 DVI-D 端口支持全高清 1080p Blu-ray (BD) 播放

音频	• 5.1 CH 高清音频（Realtek ALC662 音频编解码器）
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • 支持 Wake-On-LAN（网上唤醒） • 支持网路綫侦测功能 • 支持高能效以太网 802.3az • 支持 PXE
后面板 I/O	• 1 x PS/2 鼠标端口 • 1 x PS/2 键盘端口 • 1 x D-Sub 端口 • 1 x DVI-D 端口 • 4 x USB 2.0 端口 • 2 x USB 3.0 端口 • 1 x RJ-45 LAN 端口，带 LED（ACT/LINK LED 和 SPEED LED） • 高清音频插孔 : 线路输入 / 前扬声器 / 麦克风
存储	• 2 x SATA3 6.0 Gb/s 接口，支持 NCQ、AHCI 和 "热插拔" 功能 • 2 x SATA2 3.0 Gb/s 接口，支持 NCQ、AHCI 和 "热插拔" 功能
接口	• 1 x IR 接脚 • 1 x 打印端口接脚 • 1 x COM 端口接脚 • 1 x 机箱侵入接脚 • 1 x TPM 接脚 • 1 x CPU 风扇接口 (4 针) • 1 x 机箱风扇接口 (4 针) • 1 x 电源风扇接口 (3 针) • 1 x 24 针 ATX 电源接口 • 1 x 4 针 12V 电源接口 • 1 x 前面板音频接口 • 2 x USB 2.0 接脚（支持 4 个 USB 2.0 端口）

BIOS 功能特点	• 32Mb AMI UEFI Legal BIOS，具有多语言 GUI 支持 • ACPI 1.1 兼容唤醒事件 • SMBIOS 2.3.1 支持 • CPU、DRAM、PCH 1.05V、PCH 1.5V 电压多次调整（Voltage Multi-adjustment）
支持光盘	• 驱动程序、实用程序、防病毒软件（试用版）、CyberLink MediaEspresso 6.5 试用版、Google Chrome 浏览器和工具栏、Start8
硬件监控	• CPU/ 机箱温度感测 • CPU/ 机箱 / 电源风扇转速计 • CPU/ 机箱静音风扇（可以按照 CPU 温度自动调整机箱风扇速度） • CPU/ 机箱风扇多种速度控制 • CASE OPEN（机箱打开）检测 • 电压监控： +12V、+5V、+3.3V、CPU Vcore
操作系统	• Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit 兼容
认证	• FCC、CE、WHQL • ErP/EuP 支持（需要支持 ErP/EuP 的电源）

電子信息產品污染控制標示

依据中国发布的「电子信息产品污染控制管理办法」及 SJ/T 11364-2006「电子信息产品污染控制标示要求」，电子信息产品应进行标示，藉以向消费者揭露产品中含有的有毒有害物质或元素不致发生外泄或突变从而对环境造成污染或对人身、财产造成严重损害的期限。依上述规定，您可于本产品之印刷电路板上看见图一之标示。图一中之数字为产品之环保使用期限。由此可知此主板之环保使用期限为 10 年。

图一

有毒有害物質或元素的名稱及含量說明

若您欲了解此产品的有毒有害物质或元素的名称及含量说明，请参照以下表格及说明。

部件名称	有害物质或元素					
	铅 (Pb)	镉 (Cd)	汞 (Hg)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
印刷电路板及电子组件	X	O	O	O	O	O
外部信号连接头及线材	X	O	O	O	O	O

O: 表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T 11363-2006 标准规定的限量要求以下。

X: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T 11363-2006 标准规定的限量要求，然该部件仍符合欧盟指令 2002/95/EC 的规范。

备注： 此产品所标示之环保使用年限，系指在一般正常使用状况下。

規格

平台	• Micro ATX 尺寸 • 全固態電容設計
CPU	• 支援第 4 代 Intel® Core™ i7 / i5 / i3 / Xeon® / Pentium® / Celeron® (LGA1150 封裝) • 4 電源相位設計 • 支援 Intel® Turbo Boost 2.0 技術
晶片組	• Intel® H81
記憶體	• 雙通道 DDR3 記憶體技術 • 2 x DDR3 DIMM 插槽 • 支援 DDR3 1600/1333/1066 非 ECC、無緩衝記憶體 • 最大系統記憶體容量： 16GB （請參閱「注意」） • 支援 Intel® Extreme Memory Profile (XMP)1.3/1.2
擴充插槽	• 1 x PCI Express 2.0 x16 插槽（PCIE1： x16 模式） • 1 x PCI Express 2.0 x1 插槽
顯示卡	• 僅限整合 GPU 的處理器才可支援 Intel® HD Graphics Built-in Visuals 及 VGA 輸出。 • 支援 Intel® HD Graphics Built-in Visuals： 轉換 AVC、MVC (S3D) 及 MPEG-2 Full HW Encode1 的 Intel® 高速影像同步轉檔技術、Intel® InTru™ 3D、Intel® Clear Video HD Technology、Intel® Insider™、Intel® HD Graphics 4400/4600 • Pixel Shader 5.0，DirectX 11.1 • 最大共用記憶體 1792MB • 雙 VGA 輸出 : 透過立顯示控制器提供 DVI-D 和 D-Sub 接口 • 支援最高達 1920x1200 @ 60Hz 解析度的 DVI-D • 支援最高達 1920x1200 @ 60Hz 解析度的 D-Sub • 支援含 DVI-D 連接埠的 HDCP 功能 • 支援透過 DVI-D 連接埠的 Full HD 1080p Blu-ray (BD) 播放

音訊	• 5.1 CH HD 音訊（Realtek ALC662 音訊轉碼器）功能
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • 支援網路喚醒 • 支援網路線偵測功能 • 支援 Energy Efficient Ethernet 802.3az • 支援 PXE
後面板 I/O	• 1 x PS/2 滑鼠連接埠 • 1 x PS/2 鍵盤連接埠 • 1 x D-Sub 連接埠 • 1 x DVI-D 連接埠 • 4 x USB 2.0 連接埠 • 2 x USB 3.0 連接埠 • 1 x RJ-45 LAN 連接埠，含 LED（ACT/LINK LED 及 SPEED LED） • HD 音訊插孔： 線路輸入／前置喇叭／麥克風
儲存裝置	• 2 x SATA3 6.0 Gb/s 接頭，支援 NCQ、AHCI 及「熱插拔」功能 • 2 x SATA2 3.0 Gb/s 接頭，支援 NCQ、AHCI 及「熱插拔」功能
接頭	• 1 x IR 標頭 • 1 x 列印連接埠標頭 • 1 x COM 連接埠標頭 • 1 x 機殼防護標頭 • 1 x TPM 標頭 • 1 x CPU 風扇接頭 (4-pin) • 1 x 機殼風扇接頭 (4-pin) • 1 x 電源風扇接頭 (3-pin) • 1 x 24 pin ATX 電源接頭 • 1 x 4 pin 12V 電源接頭 • 1 x 前面板音訊接頭 • 2 x USB 2.0 標頭（支援 4 USB 2.0 連接埠）
BIOS 功能	• 32Mb AMI UEFI Legal BIOS 含 多語 GUI 支援 • ACPI 1.1 符合喚醒自動開機 • 支援 SMBIOS 2.3.1 • CPU、DRAM、PCH 1.05V、PCH 1.5V 電壓多重調整

支援 CD	• 驅動程式、公用程式、防毒軟體（試用版）、CyberLink MediaEspresso 6.5 Trial、Google Chrome 瀏覽器及工具列、Start8
硬體監視器	• CPU ／機殼溫度感應 • CPU ／機殼／電源風扇轉速計 • CPU ／機殼靜音風扇（允許按照 CPU 溫度自動調整機殼風扇速度） • CPU ／機殼風扇多重速度控制 • 機殼開啟偵測 • 電壓監控： +12V、+5V、+3.3V、CPU Vcore
作業系統	• 相容 Microsoft® Windows® 8 / 8 64 位元 / 7 / 7 64 位元
認證	• FCC、CE、WHQL • ErP/EuP Ready（需具備 ErP/EuP ready 電源供應器）

Bahasa Indonesia

Spesifikasi

Platform	• Bentuk dan Ukuran Micro ATX • Desain Kapasitor Solid
CPU	• Mendukung Intel® Core™ i7 / i5 / i3 Generasi Ke-4 / Xeon® / Pentium® / Celeron® dalam Paket LGA1150 • Desain 4 Fase Daya • Mendukung Teknologi Intel® Turbo Boost 2.0
Chipset	• Intel® H81
Memori	• Teknologi Memori DDR3 Kanal Ganda • 2 x Slot DDR3 DIMM • Mendukung DDR3 1600/1333/1066 non-ECC, memori tanpa buffer • Kapasitas maksimum memori sistem: 16GB (lihat PERHATIAN) • Mendukung Intel® Extreme Memory Profile (XMP)1.3/1.2
Slot Ekspansi	• 1 x Slot PCI Express 2.0 x16 (PCIE1: x16 mode) • 1 x Slot PCI Express 2.0 x1
Grafis	• Intel® HD Graphics Built-in Visuals dan output VGA hanya didukung dengan prosesor yang terintegrasi GPU. • Mendukung Intel® HD Graphics Built-in Visuals: Intel® Quick Sync Video dengan AVC, MVC (S3D), dan MPEG-2 Full HW Encode1, Intel® InTru™ 3D, Teknologi Intel® Clear Video HD, Intel® Insider™, Intel® HD Graphics 4400/4600 • Pixel Shader 5.0, DirectX 11.1 • Memori bersama maksimum 1792MB • Output VGA Ganda: mendukung port DVI-D dan D-Sub melalui pengontrol tampilan independen • Mendukung DVI-D dengan resolusi maksimum hingga 1920x1200 @ 60Hz • Mendukung D-Sub dengan resolusi maksimum hingga 1920x1200 @ 60Hz • Mendukung fungsi HDCP dengan port DVI-D • Mendukung pemutaran Full HD 1080p Blu-ray (BD) dengan port DVI-D

Audio	• Audio HD 5.1 CH (Realtek ALC662 Audio Codec)
LAN	• PCIE x1 Gigabit LAN 10/100/1000 Mb/s • Realtek RTL8111G • Mendukung Wake-On-LAN • Mendukung Deteksi Kabel LAN • Mendukung Energy Efficient Ethernet 802.3az • Mendukung PXE
Panel I/O Belakang	• 1 x Port Mouse PS/2 • 1 x Port Keyboard PS/2 • 1 x Port D-Sub • 1 x Port DVI-D • 4 x Port USB 2.0 • 2 x Port USB 3.0 • 1 x Port LAN RJ-45 dengan LED (ACT/LINK LED dan SPEED LED) • Soket Audio HD: Saluran masuk/Speaker Depan/Mikrofon
Penyimpanan	• 2 x Konektor SATA3 6,0 Gb/s, mendukung fungsi NCQ, AHCI, dan “Hot Plug” • 2 x Konektor SATA2 3,0 Gb/s, mendukung fungsi NCQ, AHCI, dan “Hot Plug”
Konektor	• 1 x Header IR • 1 x Header port Cetak • 1 x Header port COM • 1 x Header Intrusi Chassis • 1 x Header TPM • 1 x Konektor kipas CPU (4-pin) • 1 x Konektor kipas chassis (4-pin) • 1 x Konektor kipas daya (3-pin) • 1 x Konektor daya ATX 24 pin • 1 x Konektor daya 12V 4 pin • 1 x Konektor audio panel depan • 2 x Header USB 2.0 (mendukung 4 port USB 2.0)

Fitur BIOS	• 32Mb AMI UEFI Legal BIOS dengan dukungan GUI Multibahasa • ACPI 1.1 Kompatibel dengan Aktivitas Pengaktifan • Dukugan SMBIOS 2.3.1 • Multipengatur Tegangan CPU, DRAM, PCH 1,05V, PCH 1,5V
Dukungan CD	• Driver, Utilitas, Perangkat Lunak AntiVirus (Versi Uji Coba), CyberLink MediaEspresso 6.5 Uji Coba, Google Chrome Browser dan Toolbar, Start8
Perangkat Keras Monitor	• Sensor Suhu CPU/Chassis • Takometer CPU/Chassis/Kipas Daya • Kipas Hening CPU/Chassis (Memungkinkan Penyesuaian Otomatis Kecepatan Kipas Chassis Berdasarkan Suhu CPU) • Kontrol Multikecepatan Kipas CPU/Chassis • Deteksi CASE OPEN • Pemantauan Tegangan: +12V, +5V, +3,3V, CPU Vcore
OS	• Kompatibel dengan Microsoft® Windows® 8 / 8 64-bit / 7 / 7 64-bit
Sertifikasi	• FCC, CE, WHQL • Siap untuk ErP/EuP (memerlukan catu daya untuk ErP/EuP)

Contact Information

If you need to contact ASRock or want to know more about ASRock, you're welcome to visit ASRock's website at http://www.asrock.com; or you may contact your dealer for further information. For technical questions, please submit a support request form at http://www.asrock.com/support/tsd.asp

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